

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|----------------|----------------------|-------------------------|------------------|
| 09/747,286 | 12/21/2000 | Martin Dirk Skirha | DP-301966 9305 | |
| 7: | 590 08/29/2002 | | | |
| KATHRYN A. MARRA DELPHI TECHNOLOGIES, INC. Legal Staff | | | EXAMINER | |
| | | | LEE, EDMUND H | |
| P.O. Box 5052, Mail Code: 480-414-420 Troy, MI 48007-5052 | | | ART UNIT | PAPER NUMBER |
| 1109, 1411 4000 | 77-3032 | | 1732 | 14 |
| | | | DATE MAILED: 08/29/2002 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | AS | | | | |
|---|--|--|--|--|--|--|
| | Application No. | Applicant(s) | | | | |
| | 09/747,286 | SKIRHA ÉT AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | EDMUND H LEE | 1732 | | | | |
| The MAILING DATE of this communication app ars on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status | 36(a). In no event, however, may a reply be timed within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). | | | | |
| 1) Responsive to communication(s) filed on 23 A | <u>//ay 2002</u> . | • | | | | |
| 2a) ☐ This action is FINAL . 2b) ☑ Thi | is action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | |
| 4) Claim(s) 12-20 and 23-38 is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) <u>19 and 20</u> is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>12-18 and 23-38</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or Application Papers | r election requirement. | | | | | |
| 9) The specification is objected to by the Examiner | r. | | | | | |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. | | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | | |
| a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) | 5) Notice of Informal F | Patent Application (PTO-152) | | | | |
| | | | | | | |

DETAILED ACTION

1. Applicant's election with traverse of claims 12-18 and 23-38 in Paper No. 13 is acknowledged. The traversal is on the ground(s) that the Examiner has failed to show a prima facie case of serious burden. This is not found persuasive because a separate status in the art or separate classification is not necessary since the claims are directed to independent inventions. See MPEP 808.01(a).

The requirement is still deemed proper and is therefore made FINAL.

- 2. Claims 19-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 13.
- 3. Claim 35 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. This claim conflicts with independent claim 33. Independent claim 33 limits forming the deployment during the vacuum forming of the panel whereas dependent claim 35 limits forming the deployment after the vacuum forming of the panel. Claim 35 is confusing in light of claim 33 and does not further limit claim 33.
- 4. Claims 13-18, 31, and 34-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 1732

The phrase "providing...device" (cl 13, lns 3-4) is unclear because the word "expendable" is appropriate.

The words "apart" (cl 31, ln 2) and "expendable" (cl 31, ln 3) are confusing because it appears to be inappropriate.

The phrase "the deployment region...panel" (cl 34, ln 11-12) is confusing because it conflicts with the phrase "forming a deployment region...during the vacuum formation" (cl 34, lns 6-7).

The phrase "the deployment region... after vacuum forming of the instrument panel" (cl 35, lns 1-3) is confusing because it conflicts with the phrase "forming a deployment region... during the vacuum formation" (cl 33, lns 5-7).

Clarification and/or correction is required.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 12, 23, 24, 25, 26, 28, and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Ang et al (USPN 5792413). Ang et al teach the claimed process including forming a hidden, integral passenger air bag door in an instrument panel cover (figs 1-6); forming the panel cover having an inner surface and an opposing outer surface (figs 1-6); forming a deployment region in the inner surface of the panel cover by contacting the inner surface with at least one scoring device during the formation of the panel cover creating at least one score therein, the at least one score defining the

deployment region and providing a weakened tear pattern in the inner surface so that deployment of an air bag cushion causes the deployment region to open along the at least one score for deployment of the air bag cushion (figs 1-6); configuring the weakened tear pattern to separate under pressure generated by an inflating air bag cushion which is positioned proximate the inner surface of the instrument panel cover (figs 1-6); using a panel cover formed of synthetic material (figs 1-6); using a panel cover formed of thermoplastic material such as TEO or TPO (col 3, Ins 20-35); contacting the panel cover with the at least one scoring device prior to the setting of the

instrument panel cover (figs 1-6), and advancing a contacting edge of the at least one

toward the outer surface wherein the distance is controlled by limiting the advancement

scoring device into the inner surface of the panel cover a predetermined distance

of the device into the panel cover (figs 1-6).

Page 4

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claim 12-18 and 23-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2000159047 A in view of JP 2000272459 A. In regard to claim 12, JP 2000159047 A teaches the basic claimed process including forming a hidden, integral passenger air bag door in an instrument panel cover (abstract; figs 1-8); forming the panel cover having an inner surface and an opposing outer surface (abstract; figs 1-

Art Unit: 1732

8); forming a deployment region in the outer surface of the panel cover by contacting the outer surface with at least one scoring device during the formation of the panel cover creating at least one score therein, the at least one score defining the deployment region and providing a weakened tear pattern in the outer surface so that deployment of an air bag cushion causes the deployment region to open along the at least one score for deployment of the air bag cushion (abstract; figs 1-8). However, JP 2000159047 A does not teach forming the weakened tear patter in the inner surface. JP 2000272459 A teaches molding an airbag door having a weakened tear pattern in the inner surface of the door within a female vacuum mold (abstract; figs 1-7). JP 2000159047 A and JP 2000272459 A are combinable because they are analogous with respect to forming an airbag. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was to redesign the mold of JP 2000159047 A to allow for forming the tear pattern of JP 2000159047 A in the inner surface as taught by JP 2000272459 A in order to take advantage of the aesthetic appeal of a hidden airbag door. In regard to claims 13-18 and 23-32, JP 2000159047 A also teach providing at least one score member which is extendable and retractable upon actuation wherein the scoring member is disposed upon a cylinder which is actuated by a pneumatic adjustment system and controlled by an operator (col 4, Ins 40-49; figs 1-8); contacting the at least one scoring member with the panel cover during the formation of the panel cover (figs 1-8); forming the at least one score by advancing the at least one scoring member into the panel cover thereby causing the panel cover to thin out in predetermined locations which define the at least one score (figs 1-8); using a male vacuum forming tool (figs 1-8);

Art Unit: 1732

using a panel cover of synthetic material (abstract; col 3, lns 40-50; figs 1-8); forming the deployment region with a H-shape (figs 1-8); configuring the weakened tear pattern to separate under pressure generated by an inflating air bag cushion which is positioned proximate the inner surface of the instrument panel cover (figs 1-8); using a panel cover formed of synthetic material (figs 1-8); contacting the panel cover with the at least one scoring device prior to the setting of the instrument panel cover (figs 1-8); heating the temperature of the panel cover to a temperature higher than the temperature of the formed panel cover and scoring the panel cover after the heated panel during the forming of the panel cover (figs 1-8); contacting the panel cover with the at least one scoring device when the panel cover is at or near the elevated temperature (figs 1-8)-as a note, the scoring is performed during the forming of the heated panel cover; advancing a contact edge of the at least once scoring device into the surface of the panel cover a predetermined distance towards the opposing surface while the panel cover is disposed in a mold device (figs 1-8); advancing a contacting edge of the at least one scoring device into the inner surface of the panel cover a predetermined distance toward the outer surface wherein the distance is controlled by limiting the advancement of the device into the panel cover (figs 1-8); using a scoring blade which forms a part of a moveable cylinder, the at least one scoring blade being extendable and retractable relative to the cylinder, the cylinder and at least one scoring blade being oriented above the body so that upon actuation thereof, the cylinder and at least one scoring blade are lowered to contact the body and form the at least one score (figs 1-8); and contacting the panel cover with the at least one scoring blade when the panel cover

Art Unit: 1732

is at a temperature wherein a portion of the panel cover is deformable (figs 1-8)—a note, the blade contact the panel cover as the panel cover is being formed. However, JP 2000159047 A does not teach using a female vacuum forming tool; and using the claimed materials of claim 25. In regard to using a female vacuum forming tool, such is taught by the above combination of JP 2000159047 A and JP 2000272459 A. In regard to using the claimed materials, such materials are well-known in the panel cover and airbag art. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the claimed material in the process of JP 2000159047 A in order to form a durable panel cover.

9. Claims 33 and 35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2000159047 A in view of JP 2000272459 A. In regard to claim 33, JP 2000159047 A teaches the basic claimed process including forming a hidden, integral passenger air bag door in an instrument panel cover (abstract; figs 1-8); vacuum forming the panel cover having an inner surface and an opposing outer surface (abstract; figs 1-8); forming a deployment region in the outer surface of the panel cover by contacting the outer surface with at least one scoring device during the formation of the panel cover creating at least one score therein, the at least one score defining the deployment region and providing a weakened tear pattern in the outer surface so that deployment of an air bag cushion causes the deployment region to open along the at least one score for deployment of the air bag cushion (abstract; figs 1-8). However, JP 2000159047 A does not teach forming the weakened tear patter in the inner surface. JP 2000272459 A teaches molding an airbag door having a weakened tear pattern in

Art Unit: 1732

the inner surface of the door within a female vacuum mold (abstract; figs 1-7). JP 2000159047 A and JP 2000272459 A are combinable because they are analogous with respect to forming an airbag. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was to redesign the mold of JP 2000159047 A to allow for forming the tear pattern of JP 2000159047 A in the inner surface as taught by JP 2000272459 A in order to take advantage of the aesthetic appeal of a hidden airbag door. In regard to claim 35, Applicant is reminded of the above claim objection and 112, 2nd paragraph rejection of this claim. JP 2000159047 A teaches forming the deployment region before the cooling of the panel cover as evidenced by the continued vacuuming of the panel during the scoring. However JP 2000159047 A does not teach forming the deployment region after the vacuum forming the panel cover but before the cooling. Such sequence is well-known in the molding art in order to produce a more clear score or detail. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the deployment region of JP 2000159047 A after the vacuum forming of the panel cover in order to achieve the above result. In regard to claim 36, JP 2000159047 A does not teach applying a foam layer and a substrate layer to the foam layer. However, such are well-known in the molding art and panel cover art in order to form a cushioned panel cover which is more pleasing to touch. In regard to claim 37, JP 2000159047 A does not teach injection molding the substrate layer. However, it is well-known in the molding art to injection mold a layer upon a preform. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to injection mold the substrate layer of JP 2000159047

Art Unit: 1732

A (modified) in order to efficiently and precisely form the layer. In regard to using a scoring device which having a portion heated prior to the scoring. JP 2000159047 A does not teach heating a portion of the scoring device however, such is well-known in the molding art and scoring/cutting art in order to effectively and quickly form a cut. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to heat a portion of the scoring device of JP 2000159047 A in order to achieve the above result.

10. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2000159047 A in view of JP 2000272459 A. JP 2000159047 A teaches the basic claimed process including forming a hidden, integral passenger air bag door in an instrument panel cover (abstract; figs 1-8); vacuum forming the panel cover having an inner surface and an opposing outer surface (abstract; figs 1-8); forming a deployment region in the outer surface of the panel cover by contacting the outer surface with at least one scoring device during the formation of the panel cover creating at least one score therein, the at least one score defining the deployment region and providing a weakened tear pattern in the outer surface so that deployment of an air bag cushion causes the deployment region to open along the at least one score for deployment of the air bag cushion (abstract; figs 1-8). However, JP 2000159047 A does not teach forming the weakened tear patter in the inner surface. JP 2000272459 A teaches molding an airbag door having a weakened tear pattern in the inner surface of the door within a female vacuum mold (abstract; figs 1-7). JP 2000159047 A and JP 2000272459 A are combinable because they are analogous with respect to forming an

Application/Control Number: 09/747,286 Page 10

Art Unit: 1732

airbag. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was to redesign the mold of JP 2000159047 A to allow for forming the tear pattern of JP 2000159047 A in the inner surface as taught by JP 2000272459 A in order to take advantage of the aesthetic appeal of a hidden airbag door.

- 11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. JP 4126222 A teaches forming an airbag door having a score line in an inner surface. JP 2000280791 A teaches vacuum forming a panel cover having an airbag door.
- 12. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Examiner Edmund Lee whose telephone number is (703) 305-4019. The examiner can normally be reached on Monday-Wednesday and Friday from 8:00 AM to 4:00 PM. The fax number for Examiner Edmund Lee is (703) 872-9615

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jan H. Silbaugh, can be reached on (703) 308-3829.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

EHL

August 26, 2002

Edmund Lee

Patent Examiner, AU 1732